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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,773	04/02/2002	John William Richardson	RCA 90195	2617

7590 09/30/2004

Joseph S Tripoli
Thomson Multimedia Licensing Inc
PO Box 5312
Princeton, NJ 08543-5312

EXAMINER	
TAYLOR, BARRY W	

ART UNIT	PAPER NUMBER
2643	

DATE MAILED: 09/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/089,773	RICHARDSON ET AL.	
	Examiner	Art Unit	
	Barry W Taylor	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 June 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The amendment filed 6/24/2004 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: See SUBSTITUTE SPECIFICATION, paper dated 6/24/2004, starting on last line of page 5 and continuing to page 6 line 5. The Examiner is unable to find support in Applicant's original filed specification

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Examiner is unable to determine from the Specification as to how one of ordinary skill in the art would make and use the invention. For example, independent

claims 1, 10 and 19 generally recite system, method and apparatus for providing a telephony service in a digital subscriber loop environment. According to the general claim language, the system, method and apparatus contains device for converting analog signal into ATM-compatible format. Remote from the device is a modem that can receive digital signal from the device. Independent claims generally recite some sort of digitizer capable of receiving analog signal from telephone but it is unclear as to where the signal digitizer is located? Is it at CPE or located within the remote modem or somewhere else? It is also unclear as to how the modes of operation are chosen or switched between.

Applicant's amended specification, page 27, second paragraph, lines 6-17 with a new paragraph (see paper dated 6/24/2004, page 2). However, Applicant's continue to add confusion by using number 2105 to represent POTS digitizer and a POTS splitter 2105 (see newly amended specification). It is still unclear to the Examiner as to what the difference is between POTS splitter and POTS digitizer since both have same label. Does this mean that digitizer is located at CPE splitter or located in remote modem or somewhere else having conventional CODEC functionality?

Furthermore, the independent claims recite a telephone service is provided but the recited claim language falls short of this because the signal ends at either modem or digitizer. The Examiner is unable to determine what kind of service is provided when no service appears to be connected.

Applicant's point to title for explanation (see paper dated 6/24/2004, page 8 line 5). It appears from Applicant's title that Applicant's invention provides some sort of Fail-

to-POTS service when customer premises experiences a power outage (e.g. specification page 44 lines 17 et seq.).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplan et al (6,141,339 hereinafter Kaplan) in view of Bog et al (6,229,803 hereinafter Bog). The following rejection is being made for what is best understood by the Examiner due to the 112 rejections listed above.

Regarding claims 1, 10 and 19. Kaplan teaches a system for providing a telephone service in a digital subscriber loop environment (see loop environment figure 2), comprising:

a customer interface unit for receiving an analog signal from a telephone and converting the analog signal into a digital signal in a first format, the first format being an ATM-compatible format (see figure 2 wherein interface 204 receives analog signals from telephony 210 and 212, next the analog signal is converted into ATM 206 figure 2);

a modem residing remotely from the customer interfacing unit (see modem 208 remotely located from interface unit 204 in figure 2) for receiving the digital signal in a first format (i.e. ATM format is shown in figure 2);

a signal digitizer (see 206 figure 2) to provide voice or data over ATM using modem 208 figure 2.

the system, in first mode of operation, coupling the digital signal in the first format (i.e. ATM as shown in figure 2) to the modem (208 figure 2).

Kaplan does not show second mode of operation.

Bog teaches using an interface between a telephony card and a session manager (abstract) wherein session manager continuously monitors messages listed on figure 2 (i.e. the objects 200 through 204) and when fault occurs the manager instructs telephony card to use conventional fail-to-POTS service for the channel that is malfunctioning (see column 7).

Therefore, it would have been obvious for any one of ordinary skill in the art at the time of invention to modify the interface as taught by Kaplan to include software interface as taught by Bog for the benefit of using conventional Fail-To-POTS when channel malfunctioning as taught by Bog.

Regarding claims 2 and 11. Kaplan teaches wherein the telephone service is a POTS (col. 2 line 65 – col. 3 line 8).

Regarding claims 3, 5, 12 and 14. Kaplan teaches using modem 208 to provide voice or data over ATM.

Regarding claim 4. Kaplan teaches the analog signal (see analog telephones 210 and 212 figure 2) from telephone is coupled to the digitizer (see 206 figure 2) to provide voice or data over ATM using modem 208 figure 2.

Regarding claims 6-8 and 16-17. Kaplan teaches using interface 206 to provide first format (i.e. voice) or second format (i.e. data) over ATM.

Regarding claims 9, 18 and 20. Kaplan does not show second mode of operation is a power failure mode of operation.

Bog teaches using an interface between a telephony card and a session manager (abstract) wherein session manager continuously monitors messages listed on figure 2 (i.e. the objects 200 through 204) and when fault occurs the manager instructs telephony card to use conventional fail-to-POTS service for the channel that is malfunctioning (see column 7).

Therefore, it would have been obvious for any one of ordinary skill in the art at the time of invention to modify the interface as taught by Kaplan to include software interface as taught by Bog for the benefit of using conventional Fail-To-POTS when channel malfunctioning as taught by Bog.

Regarding claim 13. Kaplan teaches using interface 206 to provide first coupling (i.e. voice) or second coupling (i.e. data) over ATM.

Regarding claim 15. Kaplan teaches modem 208 provides Ethernet connection to user terminals 214 and 216 figure 2.

4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplan et al (6,141,339 hereinafter Kaplan) in view of Tate et al (6,400,803 hereinafter Tate). The following rejection is being made for what is best understood by the Examiner due to the 112 rejections listed above.

Regarding claims 1, 10 and 19. Kaplan teaches a system for providing a telephone service in a digital subscriber loop environment (see loop environment figure 2), comprising:

a customer interface unit for receiving an analog signal from a telephone and converting the analog signal into a digital signal in a first format, the first format being an ATM-compatible format (see figure 2 wherein interface 204 receives analog signals from telephony 210 and 212, next the analog signal is converted into ATM 206 figure 2);

a modem residing remotely from the customer interfacing unit (see modem 208 remotely located from interface unit 204 in figure 2) for receiving the digital signal in a first format (i.e. ATM format is shown in figure 2);

a signal digitizer (see 206 figure 2) to provide voice or data over ATM using modem 208 figure 2.

the system, in first mode of operation, coupling the digital signal in the first format (i.e. ATM as shown in figure 2) to the modem (208 figure 2).

Kaplan does not show second mode of operation.

Tate teaches using life line router (see figures 1-2 wherein "Lifeline" used to bypass modem for failover conditions and 320 figure 3) when failure detected in local port.

Therefore, it would have been obvious for any one of ordinary skill in the art at the time of invention to modify the interface as taught by Kaplan to include Lifeline Analogue POTS as taught by Tate for the benefit of operating in Lifeline mode when voice over AAL malfunctioning (see Tate figure 1 wherein AAL failure occurring therefore use Lifeline Analogue POTS).

Regarding claims 2 and 11. Kaplan teaches wherein the telephone service is a POTS (col. 2 line 65 – col. 3 line 8).

Regarding claims 3, 5, 12 and 14. Kaplan teaches using modem 208 to provide voice or data over ATM.

Regarding claim 4. Kaplan teaches the analog signal (see analog telephones 210 and 212 figure 2) from telephone is coupled to the digitizer (see 206 figure 2) to provide voice or data over ATM using modem 208 figure 2.

Regarding claims 6-8 and 16-17. Kaplan teaches using interface 206 to provide first format (i.e. voice) or second format (i.e. data) over ATM.

Regarding claims 9, 18 and 20. Kaplan does not show second mode of operation is a power failure mode of operation.

Tate teaches using lifeline router (see figures 1-2 wherein "Lifeline" used to bypass modem for failover conditions and 320 figure 3) when failure detected in local port.

Therefore, it would have been obvious for any one of ordinary skill in the art at the time of invention to modify the interface as taught by Kaplan to include Lifeline Analogue POTS as taught by Tate for the benefit of operating in Lifeline mode when voice over AAL malfunctioning (see Tate figure 1 wherein AAL failure occurring therefore use Lifeline Analogue POTS).

Regarding claim 13. Kaplan teaches using interface 206 to provide first coupling (i.e. voice) or second coupling (i.e. data) over ATM.

Regarding claim 15. Kaplan teaches modem 208 provides Ethernet connection to user terminals 214 and 216 figure 2.

5. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplan et al (6,141,339 hereinafter Kaplan) in view of Gerszberg et al (6,359,881 hereinafter Gerszberg). The following rejection is being made for what is best understood by the Examiner due to the 112 rejections listed above.

Regarding claims 1, 10 and 19. Kaplan teaches a system for providing a telephone service in a digital subscriber loop environment (see loop environment figure 2), comprising:

a customer interface unit for receiving an analog signal from a telephone and converting the analog signal into a digital signal in a first format, the first format being an ATM-compatible format (see figure 2 wherein interface 204 receives analog signals from telephony 210 and 212, next the analog signal is converted into ATM 206 figure 2);

a modem residing remotely from the customer interfacing unit (see modem 208 remotely located from interface unit 204 in figure 2) for receiving the digital signal in a first format (i.e. ATM format is shown in figure 2);

a signal digitizer (see 206 figure 2) to provide voice or data over ATM using modem 208 figure 2.

the system, in first mode of operation, coupling the digital signal in the first format (i.e. ATM as shown in figure 2) to the modem (208 figure 2).

Kaplan does not show second mode of operation.

Gerszberg teaches loop network service architecture wherein a lifeline is provided for continuous telephony service in the event of a power failure at the CPE

(see 126 figure 2). The lifeline is utilized to connect interface device to the local telephone company's central office (col. 7 lines 19-60)

Therefore, it would have been obvious for any one of ordinary skill in the art at the time of invention to modify the interface as taught by Kaplan to include lifeline connection as taught by Gerszberg for the benefit of operating in backup mode when CPE failure occurs.

Regarding claims 2 and 11. Kaplan teaches wherein the telephone service is a POTS (col. 2 line 65 – col. 3 line 8).

Regarding claims 3, 5, 12 and 14. Kaplan teaches using modem 208 to provide voice or data over ATM.

Regarding claim 4. Kaplan teaches the analog signal (see analog telephones 210 and 212 figure 2) from telephone is coupled to the digitizer (see 206 figure 2) to provide voice or data over ATM using modem 208 figure 2.

Regarding claims 6-8 and 16-17. Kaplan teaches using interface 206 to provide first format (i.e. voice) or second format (i.e. data) over ATM.

Regarding claims 9, 18 and 20. Kaplan does not show second mode of operation is a power failure mode of operation.

Gerszberg teaches loop network service architecture wherein a lifeline is provided for continuous telephony service in the event of a power failure at the CPE (see 126 figure 2). The lifeline is utilized to connect interface device to the local telephone company's central office (col. 7 lines 19-60)

Therefore, it would have been obvious for any one of ordinary skill in the art at the time of invention to modify the interface as taught by Kaplan to include lifeline connection as taught by Gerszberg for the benefit of operating in backup mode when CPE failure occurs.

Regarding claim 13. Kaplan teaches using interface 206 to provide first coupling (i.e. voice) or second coupling (i.e. data) over ATM.

Regarding claim 15. Kaplan teaches modem 208 provides Ethernet connection to user terminals 214 and 216 figure 2.

Response to Arguments

6. Applicant's arguments filed 6/24/2004 have been fully considered but they are not persuasive.

a) Regarding Applicant's remarks regarding 112 first paragraph rejections wherein Applicant's point to lines 5-11 page 44 (see paper dated 6/24/2004, page 7 last line).

First of all, Applicant's have amended lines 5-11 page 44 (see paper dated 6/24/2004 page 2, amendment to specification). However, Applicant's continue to add confusion by using number 2105 to represent POTS digitizer and a POTS splitter 2105. It is still unclear to the Examiner as to what the difference is between POTS splitter and POTS digitizer since both have same label. Does this mean that digitizer is located at

CPE splitter or located in remote modem or somewhere else having conventional CODEC functionality?

Furthermore, the independent claims recite a telephone service is provided but the recited claim language falls short of this because the signal ends at either modem or digitizer. The Examiner is unable to determine what kind of service is provided when no service appears to be connected.

b) Regarding Applicant's remark on page 8 line 5 wherein Applicant's generally point to title for explanation. It appears from Applicant's title that Applicant's invention provides some sort of Fail-to-POTS service when customer premises experiences a power outage (e.g. specification page 44 lines 17 et seq.).

c) Regarding Applicant's general remark on page 9, first three lines wherein Applicant's argue that Kaplan discloses a telecommunications system that does not address fault tolerance.

The Examiner notes that Applicant's independent claims 1, 10 and 19 fail to indicate that telephone service is fault tolerance.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., fault tolerance) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

d) Next Applicant's contend that Bog (page 9, lines 7-8) does not discuss the re-routing of the analog signals through digitizer.

The Examiner notes that Applicant's independent claims 1, 10 and 19 fail to indicate re-routing. Furthermore, Bog indeed teaches using conventional fail-to-POTS when fault occurs (see at least column 7 lines 22-26).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., re-routing) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

e) Applicant's repeat argument for Kaplan (see last paragraph page 9).

The Examiner has already addressed "fault tolerance" (see section c listed above).

f) Next Applicant's contend that Tate fails to teach a single lifeline telephone port (see lines 1-13 on page 10) and the combined teaching system would be lacking a signal digitizer capable of receiving an analog telephone signal and wherein the system couples the analog telephone signal to the digitizer during a second mode of operations.

Tate teaches lifeline used to bypass modem for failover conditions. Applicant's independent claims 1, 10 and 19 fail to distinguish that both modes are operable at the same time. Therefore, Tate lifeline is used to provide POTS service when failover conditions occur.

g) Applicant's next argue that Gerszberg fails to teach connecting signal to an analog telephone line (see last three lines page 10).

The Examiner respectfully disagrees. Gerszberg indeed provides for continuous telephony service (i.e. POTS/analog) in the event of power failure at the CPE (see item 126 figure 2 and at least column 7 lines 56-60 wherein standard POTS service is provide to CPE when power failure occurs at the CPE).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry W Taylor whose telephone number is (703) 305-4811. The examiner can normally be reached on Monday-Friday from 6:30am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on (703) 305-4708. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 customer service Office whose telephone number is (703) 306-0377.

CURTIS KUNTZ
PRIMARY PATENT EXAMINER
TECHNOLOGY CENTER 2600